

CUSHING (E. W.)

Prospectus of a translation.

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*Cushing (E. W.)*  
*Prospectus of translation of Dr. A.*  
*Martin's work "Pathology and therapeutics*  
*of diseases of women" Boston 1894*

## INDEX OF SUBJECTS.

	PAGE
Abrasio . . . . .	28
After-treatment . . . . .	527
Anæsthesia . . . . .	17
Anomalies of development and modifications of the form and position . . . . .	47
Anteversions and antelexions . . . . .	77
Amenorrhœa . . . . .	38
Authors, Index of . . . . .	535
Castration . . . . .	527
Cervix, Amputation of the . . . . .	345
Carcinoma of the . . . . .	345
Follicular, Hypertrophy of the . . . . .	224
Operation for laceration of the . . . . .	346
The annular wedge-shaped incision of the . . . . .	343
Conception . . . . .	44
Corpus, Carcinoma of . . . . .	319
Complications . . . . .	518
Curettement . . . . .	28
Defective development of the vagina and uterus . . . . .	47
Dilators . . . . .	23
Drainage, Tube-glass . . . . .	426, 460
Dysmenorrhœa . . . . .	44
Examination, Bimanual . . . . .	8
Examination combined . . . . .	8
Examination, Importance of the neighboring organs during the . . . . .	14
Fistula, Recto-vaginal . . . . .	335
Vesico-vaginal . . . . .	326
Genitals, Inflammation of the mucous membrane of the . . . . .	194
Gonorrhœa in women . . . . .	219
Hæmatocele, Extra-peritoneal . . . . .	421
Intra-peritoneal . . . . .	442
Inspection . . . . .	12
Introduction by author . . . . .	8
Ligaments, Diseases of the broad . . . . .	411
New-growths of the broad . . . . .	428
Menorrhagia . . . . .	41
Menstruation . . . . .	33
Derangements of . . . . .	37
Metritis, Acute . . . . .	226
Chronic . . . . .	229



	PAGE
Mucous membrane, Inflammation . . . . .	194
Polypi of the . . . . .	224
Myomata, fibromata . . . . .	252
Os, Discision of the external . . . . .	339
Ovariectomy . . . . .	502
Ovary, Carcinoma of the . . . . .	499
Dermoid tumors of the . . . . .	495
Diseases of the . . . . .	451
Fibroma of the . . . . .	495
Inflammation of the . . . . .	475
New-growths of the . . . . .	467
Sarcoma of the . . . . .	501
The solid tumors of the . . . . .	498
Tuberculosis of the . . . . .	501
Palpation . . . . .	8
Parametritis . . . . .	411
Pathology of the vagina and uterus . . . . .	47
Pelvic organs, Situation of the . . . . .	1
Perimetritis . . . . .	428
Perinæum, Laceration of the . . . . .	160
Restoration of the . . . . .	160
Peritonæum, Disease of the pelvic . . . . .	428
Physical examination of the patient . . . . .	1
Physiology and pathology of menstruation and conception . . . . .	33
Polypi of the mucous membrane . . . . .	224
Pregnancy, Tubal . . . . .	406
Pyosalpinx, Hydrohæmato . . . . .	386
Retroversions and retroflexions . . . . .	89
Salpingitis . . . . .	386
Sexual organs, Malformation of the . . . . .	48
Sound, Examination with the . . . . .	18
Speculum . . . . .	12
Sponge, Compressed . . . . .	23
Sterility . . . . .	45
Temperature . . . . .	433
Tents . . . . .	23
Tubal walls . . . . .	406
Tubes, Disease of the . . . . .	386
New-growths of the . . . . .	409
Tumors of the vulva and vagina . . . . .	243, 245
Urethra, Resection of the orifice . . . . .	337
Uterus, Adenoma of the . . . . .	294
Atrophy of the . . . . .	63
Carcinoma of the . . . . .	298
Descent and prolapse of the . . . . .	112
Examination of the interior of the . . . . .	22
Inflammation of parenchyma . . . . .	226

	PAGE
Uterus, Inversion of the . . . . .	172
Malignant new-growths of the . . . . .	294
Sarcoma of the . . . . .	223
Total extirpation of the . . . . .	366
Tuberculosis of the . . . . .	325
Version and flexions of the . . . . .	74
Vagina, Changes of form and position of the uterus . . . . .	74
Inflammation of the . . . . .	189
New-growths of the . . . . .	245
Operations in the . . . . .	326
Tumors of the vulva and inflammation of the . . . . .	189
Vaginismus . . . . .	216
Vulva, Inflammation of the . . . . .	185
New-growths of the . . . . .	243





Dr. E. W. CUSHING, *Boston*: —

MY DEAR FRIEND, — When two years ago you informed me of your intention of translating my work on the “Pathology and Therapeutics of the Diseases of Women,” it was with the greatest pleasure that I offered you my best wishes. During a long residence with me you learned my methods of work, and as a most diligent student attended my courses, so that you were in a position, as few others were, to translate into the idioms of the English language this book — the condensed expressions of the teachings of your teacher.

It would have given me great pleasure to have been able to have helped you in this. You know, however, how scanty is the time left to us after fulfilling our duties as teacher and physician; you know how the distance which separates us renders it impossible for us thus to work together. All that I could do, then, was to send you all my articles which have appeared meanwhile; by accident it has happened, however, that during the last years these have been mostly on obstetrical subjects. On the other hand, I have willingly consented to have you add to my text such notes as referred particularly to the development of our specialty in America.

With pleasure and confidence I contemplate the progress of my little book under your guidance, now that it is thus completed and perfected in English translation.

As thus equipped in English guise I see with pleasure and confidence my little book sail forth under your guidance at the helm. May our good wishes help it to be useful to its readers, and thereby bring blessings to those who are intrusted to their care!

With this greeting, I remain, yours sincerely,

A. MARTIN.

BERLIN, Feb. 1, 1890.

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## TRANSLATOR'S PREFACE.

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IN determining to translate the work of Dr. Martin into English I was influenced not only by a desire to show my appreciation of the many favors and courtesies which I received at his hand during a somewhat prolonged sojourn in 1885, but more particularly because the pathological theories advanced and the surgical treatment recommended differed so materially from what I was familiar with in current theory and practice in this country.

On entering on a very active surgical practice in a large hospital, in 1886, I was able to demonstrate the great safety and convenience of the treatment recommended in this work; and although many of the procedures have since that time come into general use, and most of the views maintained have now gained a foothold in current literature, yet at that time they were innovating.

I will mention in this connection, as instances, the regular use of the dorsal position; the constant employment of sublimated irrigation in operating, the free use of the sharp curette, followed by flushing of the uterine cavity in endometritis; the abolition of the use of wire and shot in all operations; the accurate views as to endometritis, and the disposition to regard the congestion and heaviness of the uterus as secondary to the endometritis, instead of *vice versa*, as was then commonly believed in this country.

The free use of operative measures in prolapse of the uterus, the introduction of vaginal hysterectomy for cancer, and the correct pathology and operative treatment of salpingitis, are elements of progress in gynecology for which the profession is largely indebted to Dr. Martin, not as an inventor, but as an early advocate and a brilliant operator.

This book is so largely the record of the teaching and practice of the author, that I have not felt at liberty to avail myself of his permission to add many notes, as a consistent comparison of the views of the author with those currently received would have required that each chapter be supplemented by a chapter of notes and references, while it is hardly to be supposed that the readers of this book will not already have read some one of the excellent text-books which are common in this country.

These notes, therefore, are chiefly confined to the portions of the work relating to abdominal surgery, where the art has advanced with great rapidity within the last few years, and where the personal skill and experience of the surgeon modify very materially his method of operating. All who have seen Dr. Martin's operations know that he possesses a singular dexterity and rapidity in the use of the needle; and where minutes are of importance, methods which do not presuppose these qualities are far preferable for all surgeons who have not the highest skill.

Thus in vaginal hysterectomy the use of the clamps is far easier and safer for most men than Dr. Martin's method with ligatures; likewise in supravaginal hysterectomy, the extra-peritoneal treatment of the stump is preferable for beginners. The use of flushing of the abdomen after many abdominal operations, and the judicious use of the glass drainage-tube, rest on such a foundation of authority and experience that I have thought it necessary to call attention to their use; but, with the exception of a few notes on such subjects, and the introduction of photographic figures illustrative of the text, I have not attempted to compare the theory and practice of Dr. Martin with that current in this country.

In the Introduction to the work the author has added such comments as the progress of our art during the last two years seemed to him to require. The chief interest and greatest value of the work for Americans lie in the information it furnishes of the personal views and methods of one of the most learned of teachers and successful of operators, and as such it has been a pleasure to me to employ what time I could snatch from pressing duties, during the last two years, in translating it for the benefit of those of the profession who prefer to read it in English.

It is interesting to note that the work has already been translated into French, Italian, Russian, and Spanish, showing the wide appreciation of its character. The translator is confident that it will meet with the same favor from the English-speaking profession.

E. W. CUSHING.

BOSTON, Feb. 22, 1890.

# TABLE OF CONTENTS.

INTRODUCTION BY THE AUTHOR . . . . .	xiii
I. — PHYSICAL EXAMINATION OF THE PATIENT . . . . .	1
<i>A.</i> Situation of the pelvic organs . . . . .	1
<i>B.</i> Methods for the physical examination of the patient . . . . .	8
1. Palpation. Combined examination . . . . .	8
2. Inspection. Speculum . . . . .	12
3. Importance of the neighboring organs during the examination . . . . .	14
4. Examination during anæsthesia . . . . .	17
5. Examination with the sound . . . . .	18
6. Examination of the interior of the uterus . . . . .	22
II. — PHYSIOLOGY AND PATHOLOGY OF MENSTRUATION AND CONCEPTION . . . . .	33
1. Menstruation . . . . .	33
2. Derangements of menstruation . . . . .	37
<i>A.</i> Amenorrhœa . . . . .	38
<i>B.</i> Menorrhagia . . . . .	41
<i>C.</i> Dysmenorrhœa . . . . .	44
<i>D.</i> Conception . . . . .	44
<i>E.</i> Sterility . . . . .	45
III. — PATHOLOGY OF THE VAGINA AND UTERUS . . . . .	47
<i>A.</i> Anomalies of development and modifications of form and position . . . . .	47
1. Defective development of the vagina and uterus . . . . .	47
i. Malformation of the sexual organs . . . . .	48
ii. Atrophy of the uterus . . . . .	63
iii. Hypertrophy of the uterus . . . . .	72
2. Changes of form and position of the uterus and vagina . . . . .	74
i. Versions and flexions of the uterus . . . . .	74
<i>a.</i> Anteversions and antelexions . . . . .	77
<i>b.</i> Retroversions and retroflexions . . . . .	89
ii. Descent and Prolapse of the uterus and vagina . . . . .	112
iii. Laceration of the perineum. Restoration of the perineum . . . . .	160
iv. Inversion of the uterus . . . . .	172
<i>B.</i> Inflammation of the mucous membrane of the genitals . . . . .	180
1. Inflammation of the vulva . . . . .	185



III. — PATHOLOGY OF THE VAGINA AND UTERUS. — *Continued.*

2. Inflammation of the vagina . . . . .	189
3. Inflammation of the uterine mucous membrane . . . . .	194
<i>a.</i> Vaginismus . . . . .	216
<i>b.</i> Gonorrhœa in women . . . . .	219
<i>c.</i> Polypi of the mucous membrane, Follicular hyper- trophy of the cervix . . . . .	224
<i>C.</i> Inflammation of the uterine parenchyma . . . . .	226
1. Acute metritis . . . . .	226
2. Chronic metritis . . . . .	229
<i>D.</i> Tumors of the vulva and vagina . . . . .	243-245
1. New growths of the vulva . . . . .	243
2. New growths of the vagina . . . . .	245
<i>E.</i> New growths of the uterus . . . . .	252
<i>i.</i> Myomata; Fibromata . . . . .	252
<i>ii.</i> Malignant new growths of the uterus . . . . .	294
<i>a.</i> Adenoma of the uterus . . . . .	294
<i>b.</i> Carcinoma of the uterus . . . . .	298
<i>i.</i> Carcinoma of the cervix . . . . .	298
<i>ii.</i> Carcinoma of the body . . . . .	319
<i>c.</i> Sarcoma of the uterus . . . . .	223
<i>d.</i> Tuberculosis of the uterus . . . . .	325
<i>IV.</i> — OPERATIONS IN THE VAGINA . . . . .	326
1. Vesico-vaginal fistula . . . . .	326
2. Recto-vaginal fistula . . . . .	335
3. Resection of the external urethral orifice . . . . .	337
<i>V.</i> — OPERATIONS ON THE UTERUS . . . . .	339
1. Discision of the external os . . . . .	339
2. The annular wedge-shaped excision of the cervix . . . . .	343
3. Operation for laceration of the cervix . . . . .	346
4. Amputation of the cervix . . . . .	345
5. The high excision of the cervix . . . . .	363
6. Extirpation of the uterus through the vagina . . . . .	366
<i>VI.</i> — DISEASES OF THE TUBES . . . . .	386
1. Salpingitis. Hydro-Hæmato-Pyosalpinx . . . . .	386
2. Diseases of the tubal walls . . . . .	406
3. Tubal pregnancy . . . . .	406
4. New growths of the tubes . . . . .	409
<i>VII.</i> — DISEASES OF THE BROAD LIGAMENTS . . . . .	411
1. Parametritis . . . . .	411
2. Extra-peritoneal hæmatoma . . . . .	421
3. New growths of the broad ligaments . . . . .	426
<i>VIII.</i> — DISEASES OF THE PELVIC PERITONÆUM . . . . .	428
1. Perimetritis . . . . .	428
2. Intra-peritoneal Hæmatocele . . . . .	442
<i>IX.</i> — DISEASES OF THE OVARIES . . . . .	451
1. Inflammation of the ovary . . . . .	457
2. New growths of the ovary . . . . .	467

IX. — DISEASES OF THE OVARIES. — *Continued.*

3. Dermoid tumors of the ovary . . . . .	495
4. The solid tumors of the ovary . . . . .	498
<i>a.</i> Fibroma of the ovary . . . . .	498
<i>b.</i> Carcinoma of the ovary . . . . .	499
<i>c.</i> Sarcoma of the ovary . . . . .	501
<i>d.</i> Tuberculosis of the ovary . . . . .	501
5. Ovariectomy . . . . .	502
Complications . . . . .	
After-treatment . . . . .	518
6. Castration . . . . .	527
INDEX OF AUTHORS . . . . .	536
INDEX OF SUBJECTS . . . . .	539





## INTRODUCTION BY THE AUTHOR.

DURING the two years which have elapsed since the publication of the second German edition of this work, there have been many advances in gynæcology, and I take this opportunity to point out the most important of these, in order that the American edition may fully represent the state of our specialty to-day.

### DILATATION OF THE CERVICAL CANAL.<sup>1</sup>

Among the methods of dilatation of the cervix, that recommended by VULLIET<sup>2</sup> has recently come very much into favor. It consists in the *dilatation of the cervix by systematic packing with strips of iodoform gauze*. The procedure has been published *in extenso* by CORDES at the International Medical Congress in Washington, and by LANDAU in VOLK-MANN's pamphlets. More recently DUEHRSSEN has employed the same extensively in obstetric practice, for the purpose of checking hæmorrhage, with the best results. The cervix is fixed by means of a bullet-forceps, after it has been exposed in an appropriate manner, and then small strips of iodoform gauze are pushed up as high as possible into the cervical canal. After these have remained for twelve to twenty-four hours, they are removed and replaced by new ones. When this is done a striking relaxation of the cervical tissues occurs, and thereby a dilatation, which, after this procedure — which, according to authors, is entirely without danger — has been repeated two, three, or even four times, will lead to such a degree of dilatation as to admit the passage of the finger. It is certainly worth while to employ this procedure in an extensive manner in gynæcology, and it appears to deserve the preference over the disagreeable circumstances connected with dilatation by means of sponge and laminaria tents, as well as over that of the tupelo-pencils and dilatation by means of dilators. In how far it may also replace incision of the cervix, I leave undecided. I myself have had only a very modest experience with the method, and will not conceal the fact, that in one case, which lately came under my care, the dilatation, by means of the iodoform-gauze tamponade, rendered accessible the intramurally situated myoma; but

<sup>1</sup> Page 27, to follow the 2d paragraph.

<sup>2</sup> Rev. d. la Suisse, Tom. 2, 1885.

septic infection had already occurred when the physician turned the patient over to me, after he had attempted in vain to enucleate this myoma.

#### TREATMENT OF CHRONIC METRITIS.

Recently the excision<sup>1</sup> of erosions and treatment of endometritis and also metritis chronica by this means has been recommended by many, and the priority is ascribed to CARL VON BRAUN on the one side, and to SCHROEDER on the other. As the polemic discussion which followed the reading in Cassel, in 1878, of my paper, and was directed against the proposition made therein regarding this treatment, was exclusively aimed at me; and as I, in spite of all contradictions and inimical attacks, have carried out consistently this procedure, and, as I believe, that by doing so I have introduced among gynæcologists this so beneficent procedure in the treatment of chronic metritis which was formerly considered incurable, as is well known, — it seems to me perfectly justifiable for me to make a few remarks here to settle the priority. CARL VON BRAUN's recommendation, which was supported only by FUERST, was directed against hypertrophy of the cervix, induration, and congestion, as they essentially were regarded as precursors of new-growths. SCHROEDER at first spoke vehemently against the excision of the cervix as a method of treatment of chronic metritis, and only later on he very gradually accepted the performance of the operation as a remedy for chronic metritis.

In how far chronic metritis may be cured by electrotherapy, is at present entirely a subject of investigation. If we take into consideration that in electrotherapy the mucous membrane is caused to form an extensive eschar, and that cicatrization, according to this manner of treatment of the mucous membrane, extends to the muscular tissue of the uterus, then the hope that the uterus is also caused to shrink by electrotherapy is only founded on the somewhat vague representations concerning the action of the galvanic current, in regard to resorption of tissues by the so-called *electrolysis*. It still remains incomprehensible and has not been explained yet by the adherents of the electrolytic method, wherein the lysis proper consists; in how far the uterus is healed by way of this process of shrivelling by making eschars by means of electrolytic treatment seems yet, however, very doubtful in one point. It would go on then to cicatrization, and the development of cicatricial tissues in the uterus is just what is at least of very doubtful advantage for the resorption of this organ and for its later developments in an eventually occurring pregnancy, and so I should advise to make only the most cautious experiments in the treatment of chronic metritis by means of electrolysis.

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<sup>1</sup> Page 242, to interpolate before the sixth line from the bottom of the page.

sutures. The silk sutures are allowed to remain as long as possible, up to two and a half weeks, and then removed. The fear that the so-dislocated uterus will act impedingly upon the bladder instead of on the rectum, as it did in the position of retroflexion, has apparently been realized in only a few cases. However, in such cases the uterus had to be again separated from the abdominal wall. Pregnancy has not occurred yet in the uterus fixed to the abdominal wall, as far as the author knows.

### MASSAGE OF THE UTERUS.

Among the adjuvants of gynæcological therapy, massage is more and more recommended. The most recent author on gynæcological massage, ARNDT,<sup>1</sup> speaks most favorably of it. The massage should essentially be performed through the abdominal wall; and the hand, being introduced into the vagina, should only serve to fix the uterus, and form a base upon which the different rubbing and pushing movements are made.

According to former communications, especially those of SCHULTZE, VON PREUSCHER, and PROFASBER, the author has also tried to practise this massage, although to a limited extent; and it would certainly not be justifiable to deduce a final decision already from the experiments, however carefully conducted. He confines himself here to reference to the above-mentioned works, and at the same time also to expression of his doubts whether every certainty of diagnosis which is indispensable for this massage is not absent only too often. For if, even in those well skilled in gynæcology, this difficulty is probably done away with, it is to be feared that by a generalization of this method only too often inflammatory processes of the surrounding region, with not yet sacculated pus, and especially purulent contents of the Fallopian tube, will be unfortunately distributed by the massage, and driven out from the sacculations just mentioned. The results of massage, especially in conditions of relaxation of the floor of the pelvis, are confirmed by so many that it would consequently be unjust to doubt their statements. The objection of the author regarding this was especially directed against the employment of massage in affections of the perinæum, which latter cannot be cured by it; moreover, hyperplasias of the walls of the vagina, which always again protrude from the gaping orifice of the vagina, do not disappear under massage, and in the removal of the same he sees an essential advantage in the operative treatment of these things.

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<sup>1</sup> Berlin. Klin. Wchnschr., 1890, Nos. 1 and 2.



## VENTRO-FIXATION OF THE UTERUS.

To the chapter treating of the therapy of retroflexion and the treatment of prolapsus uteri are to be added the new proposals, which are directed towards ventro-fixation of the uterus, and which endeavor, in an analogous manner, to secure the elevation of the uterus.

Ventro-fixation was first suggested in Germany by the proposition of PETER MUELLER,<sup>1</sup> for the purpose of curing prolapse. (Meeting of naturalists in Baden-Baden, 1879.) MUELLER's proposition was received with but little favor. A further suggestion to bring the uterus in contact with the abdominal wall, and thus prevent the falling downward or the falling backward of this organ, has been made by ALEXANDER, after whom the operation for shortening the round ligaments is also called Alexander's operation.<sup>2</sup> The operation for fixation of the corpus uteri to the posterior surface of the abdominal wall has taken the place of the shortening of the round ligaments. Its first advocates in Germany were OLSHAUSEN<sup>3</sup> and SAENGER.<sup>4</sup> Since then a number of authors have interested themselves in this procedure, especially LEOPOLD;<sup>5</sup> and at present this procedure is practised to quite an extent. Simultaneously with these experiments there appeared a proposal by SCHUECKING to double the uterus on itself, and fasten it by means of an iron wire or metallic suture, and to fix it in a position of antelexion. This latter procedure, which, without any control, is left to a guidance by the fingers in the depths of the pelvis, — which, however, is rather unreliable, — appears extremely uncertain, and at all events has found favor only in a limited measure with the German gynecologists. In the same manner nearly all German gynecologists have remained reserved towards Alexander's operation. The shortening of the round ligaments in itself is certainly quite a simple procedure. Incision in the groin over the inguinal canal, searching<sup>1</sup> for the terminations of the round ligament, tracing them back without injuring the peritonæum, sewing them in by one, two, or three sutures, and closure of the wound. Entirely irrespective of the fact that this operation has occasionally been rendered impossible through a deficient development of the round ligaments, and in other cases has offered vexatious obstacles through the accidental difficulty connected with the finding of the terminations of the round ligaments, want of confidence in the lasting

<sup>1</sup> Correspondenz Blatt f. Schweizer Aerzte, 1887, No. 13.

<sup>2</sup> The treatment of backward displacement, Lond., 1884. — Verhändl. d. i. Cong. d. deutschen Ges. f. Gynækol., 1886, p. 252.

<sup>3</sup> Centralblatt für Gyn., 1886, No. 43.

<sup>4</sup> *Ibid.*, 1888, Nos. 2 and 3.

<sup>5</sup> *Ibid.*, 1888, No. 11.

## ON THE ELECTRO-THERAPEUTICS OF MYOMATA.

The cases of successful treatment of myomata by electro-therapeutics<sup>1</sup> have lately accumulated in an extraordinary manner. It is especially THOMAS VEIT who, in his report of one hundred and six cases, has again given a powerful impetus to electrotherapy. The experience of the author at present is limited to ten cases, and also in these his judgment is limited by the fact that, especially in the last three cases, the number of the séances is not yet large enough. Among them there are three tumors of considerable size; the others are smaller, reaching the size of a fist.

The results in these ten cases show that hæmorrhage, the most troublesome and dangerous symptom of myomata, may usually, indeed, be controlled; in fact, in those large multiple tumors, which apparently were situated intramurally, and included the fundus, hæmorrhage ceased nearly entirely. Several small tumors were not influenced in the same manner, and the hæmorrhages continued unchanged in spite of very frequent sittings, so that here the result must be regarded as a very doubtful one. One patient, who had a myoma of the size of an ostrich egg, had such violent pains after seven sittings, that she insisted upon being operated. The operation was performed, and the patient recovered. A second symptom, often so frequently complained of, is the phenomena of pressure. These disappeared in all of nine cases, so that in this respect the result is very satisfactory. An essential decrease in size of the tumors has, up to now, not been obtained in any case. The author would not neglect to communicate these experiences at present, and he will not let himself be discouraged from making still further experiments with the procedure.

## SUPRA-VAGINAL AMPUTATION OF THE UTERUS.

After the author had operated a series of successful cases by the method of amputation of the collum uteri, described on p. 281, the result of the operation proved again to be less favorable. The stump of the collum seemed to be in many cases the point of departure of very unfortunate terminations. To be sure, hæmorrhages of an extent worthy of mention originated thence less frequently than did, undoubtedly, septic germs penetrate from here into the abdominal cavity, developing peritonitis. Under these circumstances he performed extirpation of the collum; indeed, he first used a combined procedure resembling that of FREUND in extirpation of the uterus for carcinoma. First he performed laparotomy,

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<sup>1</sup> See page 275.

amputated the corpus, secured the stumps of the ligament; afterwards closed the abdomen, and then performed excision of the stump of the cervix, as in total extirpation per vaginam. One cannot deny that there-with the duration of the operation is unavoidably long, and hence the author has, since operating on about fifteen cases, decided upon the following procedure: laparotomy is performed, the tumor dragged up to the abdominal wound, the ligamenta infundibulo-pelvica ligated, the collum constricted by means of a piece of rubber tubing, and then the corpus amputated. After space is obtained in this manner, an assistant makes the posterior vaginal fornix tense; thereupon the knife is passed through the insertion of the pouch of Douglas on the uterus.

After opening the posterior vaginal fornix the lower border is first sutured up towards the pouch, and then step by step through this opening the ligamenta lata and the vaginal fornix are ligated, the needle being introduced from the peritonæum into the vaginal fornix, and from there again towards the peritonæum. Then both the ligaments are severed; next the collum is separated from the bladder itself, being, if necessary, separated manually, and the sutures brought through exactly as at the sides. With this the loss of blood is minimal; a drainage-tube is placed in the wound, running down through the vagina, and the abdominal wound closed. Reaction is to be regarded as entirely favorable in these cases, which is shown by the statistics added.

Of sixteen patients, eleven had an uneventful recovery; one died of septic peritonitis; two perished from kinking of an intestine; one most extremely anæmic patient died in collapse a few hours after a bloody operation.

For those cases in which suppuration of the tubes had taken place with perforation, especially into the rectum, the author has given a procedure which, up to now, has been used in six cases with very satisfactory results, after he had, at different times, with results but little satisfactory, tried separating these pus-sacs from the rectum and closing the intestine by endorrhaphy. On these cases and the procedure itself he had Horatio Bigelow report in the "*American Journal of Obstetrics*," *xxi.*, Aug., 1888, to which he refers.

#### TUBAL PREGNANCY.<sup>1</sup>

The number of tubal pregnancies reported has increased extraordinarily during recent years. Investigations with regard to those cases, however, in which not the ovum, but only a hæmorrhagic effusion into the tube with a rupture of this effusion, was found, render it doubtful whether the

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<sup>1</sup> Page 406.



condition here in question really be tubal pregnancy, and whether it is justifiable in simple hæmatosalpinx always, and without further consideration, to think of pregnancy. The investigations, especially of ORTHMANN, lead one to suspect that often enough, apparently, villi of the tubal wall have been taken for placental or chorion villi. Also the investigations of KELLER and KARL RUGE in this direction are of extreme value; so that to-day, if the diagnosis of tubal pregnancy be made, one must demand the proof of chorion Villi or of parts of decidual tissue to a greater extent than has hitherto been furnished. That in spite of that, tubal pregnancy is relatively very frequent, remains, however, undoubted. Even those cases are increasing in number in which a woman becomes pregnant in one tube, and after her life being saved by an operation becomes pregnant in the other, which observations were probably formerly held to be hæmatocele formations of a high degree. Those cases are increasing in number in which, by early operations, or also by bursting of the tube, the women have been saved; and finally the cases are accumulating where, from the developed tubal and extra-uterine sac, living children are extracted, and with preservation of the mother and child this so dangerous operation is brought to a fortunate end. But not only in an operative manner have a large number of women been saved in the last few years. The statements of WINKEL especially (*Gesellschaft für Gynäkologie, Halle, 1888*) have again directed the attention of physicians to the old method of treatment of FRIEDREICH, consisting in giving injections of morphine, thus killing the fœtus, awaiting the shrinking, respectively the evacuation of the sac. The cases published by WINKEL are astonishingly favorable, and under certain conditions this treatment will have to be imitated. Unfortunately, in all these experiences the diagnosis of tubal pregnancy has hitherto not gained in absolute certainty; we are always limited to proving that a growing tumor is situated near the uterus; that a certain development of blood-vessels takes place in the pelvis, a certain softness of the tumor is remarked, shreds of decidua are seen to pass away occasionally; and, on the other hand, one may observe that peculiar contraction which precedes rupture. When extra-uterine pregnancy must be admitted, and the injection of morphine is not desirable, on account of the great inaccessibility of the tumor, then the following points are to-day accepted by many:—

1. As soon as the diagnosis of an extra-uterine pregnancy is well founded, the removal of the sac is justified.
2. If the tumor has ruptured, then laparotomy immediately performed is essentially more favorable than expectant therapy.
3. If the sac be so large that one must suspect a viable child therein,

then opening of the sac seems justified as soon as one may hope that the child can live on, outside of the uterus. To cause such a fully developed child to perish does not seem justified.

4. In small tumors, hence in pregnancy but little advanced, extirpation of the whole is justified, as the author proposed at the International Congress held in London, 1881.

5. Whenever possible, one should also extirpate the sac in further developed tumors.

6. Ligation of the placenta should be attempted, and, if possible, carried out, so that the sac may be either entirely extirpated, or, after drainage towards the vagina, it may be closed at least from above, so that the laparotomy may be finished.

7. If this does not appear practicable, then the placenta should be left, the cavity having been filled out with iodoform gauze, in order by this internal pressure to prevent separation of the placenta and hæmorrhage until obliteration of the vessels has taken place, so that the placenta may either fall off, or perhaps may be removed. The author himself, up to now, has had opportunity to perform laparotomy, on account of extra-uterine pregnancy, twenty-two times.

Twenty-two cases were operated upon; eighteen recovered. Two were septic previously, and even after the removal of the suppurating sac could not be saved; two were, in consequence of the rupture, extremely anæmic, and died in collapse, to be sure, with a rise of temperature immediately preceding death. Upon *post mortem* examination no cause could be found. Moreover, I would refer to the investigations of ORTHMANN, which will appear in the *Zeitschrift f. Geburtsh. und Gynäk.*

#### VAGINAL EXTIRPATION OF THE UTERUS.<sup>1</sup>

Among the procedures which deserve to be mentioned among the modifications of vaginal extirpation, reference may here be made to that of RICHELOT, where, instead of performing ligation of the ligaments, they are only placed in clamps. RICHELOT's procedure is especially defended in Germany by LANDAU and THIEME (meeting of naturalists, Cologne, 1888). The author himself has had no experience with this method; he has only modified his own procedure, so that after separating the uterus from its surroundings, which have previously been ligated, when the uterus with its adnexa moves downwards, he grasps the latter before ligation, with strong bullet-forceps; then the uterus is separated, and the stumps sutured into the vault of the vagina, before removing the bullet-forceps. As to the results of vaginal extirpation of the uterus, it does



not yet, at this time, appear justifiable to form statistical tables from which further conclusions can be deduced. The procedure is recognized as legitimate; to conclude as to the actual duration of the period of freedom, and the extent which women afflicted with carcinoma may be saved, will seem justifiable only after an observation of such cases extending over about ten years. Yet so much is clear, that by means of total extirpation we gain more for the unfortunate patients than by all the other methods with deep and partial removal, and that, in the majority of cases, it includes a fortunate state of good health, even if sometimes only a relatively short period of freedom is secured for the woman.

#### ON THE TECHNIQUE OF LAPAROTOMY.<sup>1</sup>

With reference to the technique of laparotomy in later years, progress has been made above all in this direction, that the use of the spray has been abandoned. The extensive inhalations of carbolic acid occasioned by the spray have, to the author, also proved dangerous to health, for violent perspirations follow the strong action of carbolic-acid inhalations, and in the course of the latter, rheumatic affections of the joints develop. The antiseptis is conducted in the following way: The room which is selected for laparotomies is scoured, on the day before the operation, with lye; then a ten-per-cent. carbolic-acid spray is allowed to run down all the walls for two hours, while the room is shut off, and is only opened again before the beginning of the operation, mostly twelve hours after the use of the spray. In order to sterilize any objects, they are heated above 212° F. in an oven heated by gas, and which has between its walls layers of asbestos. The cleansing of the hands and instruments is done, above all, by the very free use of soap. The hands are washed in carbolic-acid water, and soaped, then rubbed off with alcohol, and at last put into a 1:2000 sublimate solution. In the same manner the abdominal wall is cleansed, the patient having taken a bath previously; the sponges are cleansed in the old way, and are also to-day prepared separately for every patient. Every patient receives her own sponges, which all are sterilized by boiling in a carbolic-acid solution. Pouring of carbolic-acid water or sublimate solution into the abdominal cavity is not resorted to any longer. The sopping out is done by means of these sponges, which are dried, so that thereby no great amount of fluid is carried into the abdominal cavity; also the sopping out is done to the same limited extent as before. As a peculiar modification, the author has adopted a procedure which was proposed to him by his matron, Mrs. Horn, and which has for its object to prevent, if possible,

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<sup>1</sup> Page 507.



the agglutination of the intestines to the abdominal wound. A sponge dipped in sterilized oil is placed under the abdominal wound while it is being sutured, so that a stratum of oil separates the intestines from the abdominal wound. However, up to now I have not had an opportunity to observe by comparative experiments in how far this hinders adhesions to the intestines. Then in cases in which pus had poured into the abdominal cavity, and in which extensive wound-surfaces had to be left in the depths of the pelvis before closing the abdominal wound, a sponge dipped into oil was pressed on the raw surfaces, and then the abdomen closed. Three times in this manner patients in whom there were cocci certainly viable, although of an uncertain character, recovered without the accession of a peritonitis. In seven other cases, in which pus not having viable cocci obtained entrance into the abdominal cavity, recovery took place in the same manner. As it then impressed one that this sterile oil was unfavorable to the development of the cocci and the ptomaines, experiments were made in order to see how far this fact, so found, could be pursued. The result of these experiments has not been concluded, as yet; but the author, having used it in ten cases already, does not hesitate to publish it, and to recommend it to his *confrères* in analogous cases.





